# Suicide in Indiana 2001-2005

# A Report on Suicide Completions and Attempts



Judith A. Monroe, MD State Health Commissioner

Injury Prevention Program September 2007

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Dear Colleagues,

It is a great pleasure to introduce this suicide data report to you. We hope that many people will utilize the extensive information provided in this Suicide in Indiana, 2001-2005 Report to better understand the problem of suicide and to collaborate for effective programs and services to assist people at risk for attempting or completing suicide.

This report is the third edition being published by the Indiana State Department of Health Injury Prevention Program. The first report analyzed suicide data from 1996-1999 in 14 pages. The second report analyzed suicide data from 1999-2001, was the first report to include hospital discharge data from the first six months of 2002, and had grown to 24 pages. The current report has now expanded to 53 pages and includes information on suicide attempts, suicide survivors, youth suicide, risk factors and protective factors, some county-level data, and the Indiana Suicide Prevention Coalition. The report continues the tradition of providing a resource directory of Indiana and national suicide prevention organizations and websites where further information can be obtained.

Suicide is an important public health issue. As noted in the report, an average of one person dies by suicide in the U.S. every 16 minutes. For Hoosiers, 1 out of 5 injury related deaths (more than 700 deaths annually) occur from suicide. Many people are not aware that suicide takes almost twice as many lives as homicide, and it is estimated that a minimum of six people are directly affected as suicide survivors for each suicide death.

Data on suicide attempts provided in this report must be used with great caution. Due to a number of limitations of the data, the hospital and emergency department data is an underestimation of the actual number of suicide attempts. However, the economic impact is demonstrated through the fact that total hospital charges for inpatient care related to self-inflicted injuries for Hoosiers were at least \$58 million from 2003-2005. An additional \$16.8 million of charges for emergency department care occurred over that same time period.

The Indiana Suicide Prevention Coalition, formed in 2001, continues to be the organization coordinating much of the advocacy and suicide prevention activities in the state. Many Hoosiers, who volunteer their time and energy to address all aspects of suicide prevention through the Coalition and its related regional councils, must be commended.

Sincerely,

Charlene Graves, MD Medical Director, Injury Prevention Program Indiana State Department of Health

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## **Highlights**

# Mortality, 2001-2005<sup>(4)</sup>

- ➤ In 2005, 735 Hoosiers died by suicide. Males accounted for 84% (615) of all suicides, of which 95% (585) were white.
- ➤ During 2001-2005, 3,595 people died by suicide, making it the 11<sup>th</sup> leading cause of death among Hoosiers.
- ➤ Suicide was the second leading cause of death in the 25-34 age group, the third leading cause of death among those 15-24 years of age, fourth among those 35-44 years of age, and the fifth leading cause of death for ages 10-14.
- ➤ Hoosier males (19.81 per 100,000) were over four times more likely to commit suicide than females (4.24 per 100,000).
- ➤ White Hoosiers accounted for 94% of the suicides in Indiana.
- ➤ White males over 65 years of age had the highest suicide rate (31.48 per 100,000) followed by white males 45-54 years of age (29.14 per 100,000) and black males 20-34 years of age (27.89 per 100,000).
- ➤ The manner that people died by suicide included 57% by firearms, 21% by suffocation, 17% by poisoning, and 5% by other methods.
- ➤ The most common method of male suicide was firearms and the most common method for females was poisoning.

# **Inpatient Data on Suicide Attempts, 2003-2005**(6)

- ➤ 6,894 people were seen as inpatients for suicide attempts, with an average age of 35.
- Females accounted for the majority (59% or 4075) of suicide attempts.
- For attempts, 93% involved poisoning, with the top three medications involved being tranquilizers, pain relievers, and antidepressants.

# Emergency Department/Outpatient Visits for Suicide Attempts, 2003-2005<sup>(6)</sup>

- ➤ 9,042 people were seen in the hospital emergency departments for suicide attempts, with the average age being 29.
- Females accounted for the majority (60% or 5386) of suicide attempts.
- ➤ Of attempts seen in the emergency department, 68.1% involved poisoning, with tranquilizers and antidepressants being used most often; 23.3% of attempts involved cutting or piercing methods.

## Suicide and Youth, 2005

- ➤ Suicide is on the rise among those 15-19 years of age. (4)
- ➤ In 2005, 27.3% of high school students reported feeling sad or hopeless one or more times during the past 12 months. (8)
- > 9.6% of Indiana high school students reported that they attempted suicide in the previous 12 months. (8)
- ➤ 18% of 9th through 12th grade Hoosiers seriously considered attempting suicide during the past 12 months. (8)
- ➤ 15% of the students had a plan for how they would attempt suicide. (8)

<sup>\*</sup>Additional highlights are underlined and bolded throughout the paper.

#### Introduction

Suicide occurs across all economic, racial/ethnic, age, and social boundaries. Suicide accounts for approximately 30,000 lives lost in the United States each year or approximately 89 suicides a day. In 2004, 535,000 Americans were seen in hospital emergency departments for self-inflicted injuries, commonly termed suicide attempts. Still, many suicides or suicide attempts go unreported, making the magnitude of the problem far greater than what current statistics demonstrate.

Suicide is a public health problem, because most suicides are preventable. Taking a public health approach to suicide involves defining the problem, identifying the causes and protective factors, developing and testing interventions, and implementing interventions to discover what makes an impact in reducing suicide attempts and deaths. (3)

The Injury Prevention Program at the Indiana State Department of Health (ISDH) compiles and disseminates data on suicide based on the most recent mortality and morbidity data available. The mortality and morbidity data help identify populations at risk as well as expose trends in suicide incidence and prevalence. The objective of this report is to take the initial step of the public health approach: to define the problem, both in the U.S. and in Indiana. The report also provides an overview of risk factors, protective factors, prevention issues, and local and national resources available.

#### **Suicide in the United States**

Prior to 1998, suicide ranked in the top ten leading causes of death in the U.S. The most recent data from the Centers for Disease Control and Prevention (CDC) demonstrates that suicide ranks as the 11th cause of death for Americans (Table 1). An average of one person dies by suicide every 16 minutes. Since 1990, suicide rates in the U.S. have been quite stable with rates ranging between 10.7 and 12.4 per 100,000. Between 2001 and 2004, suicide accounted for 126,200 deaths, an age-adjusted rate of 11.85 per 100,000 population.

Nationally, suicide is the second leading cause of death among those 25-34 years of age, and the third leading cause of death among youth and young adults (ages 10-14 and 15-24 respectively) (Table 1). Figure 1 displays a more detailed breakdown of suicide deaths by age group. More youth and young adults die from suicide than from heart disease, cancer, AIDS, birth defects, pneumonia and influenza, stroke, and chronic lung disease combined. From 2001 to 2004, persons under age 25 accounted for 13% of all suicides. Each year there are about ten youth suicides for every 100,000 youth, with an average of one person under 25 years of age committing suicide every two hours. Statistics show that youth and young adult suicide rates increased more than 200% from the 1950's to the late 1970's, remained stable from the late 1970's to the mid-1990's, and, since then, have slightly decreased. However, youth suicide rates increased in 2004 by 18%. While suicide is prevalent among the youth, rates increase with age and are highest among Americans 80 years and older, especially those who are divorced or widowed. Between 2001 and 2004, suicide was the 18<sup>th</sup> leading cause of death for persons over the age of 65 resulting in 5,198 deaths (14.26 per 100,000 persons).

Whites (11.85 per 100,000) have higher suicide completion rates than American Indian/Alaska Natives (10.83 per 100,000), Asian/Pacific Islanders (5.53 per 100,000), and blacks (5.35 per 100,000). Whites accounted for 90% of all suicides. When comparing gender differences from 2001-2004, males (18.11 per 100,000) were over four times more likely to die from suicide than females (4.25 per 100,000). Males accounted for 80% (100,850) of all suicide deaths, of which 73% (91,288) were white males. Overall, females died by suicide less often than males, and white females, who represented 18% (22,889) of all suicides, died by suicide more often than black females.

Firearms remain the most common method of suicide regardless of age, except for youth ages 5-14 for which suffocation (plastic bag, hanging, etc.) was the most common method. Of the 126,200 individuals who took their lives from 2001-2004, more than half (54%) used a firearm, 21% used suffocation, 17% used poison, and 8% used another method. The most common method of suicide for males was firearms, with males using firearms (11.78 per 100,000) six times more often than their female counterparts (1.61 per 100,000). Since 2001, poisoning surpassed firearms as the most frequently used method for female suicides. (5)

Table 1: Eleven Leading Causes of Death, U.S. 2001-2004, All Races, Both Sexes

|      | Age Groups                                |   |   |   |   |                                   |   |  |  |   |   |
|------|---|---|---|---|---|-----------------------------------|---|--|--|---|---|
| Rank | <1  | 1-4   | 5-9   | 10-14   | 15-24   | 25-34                             | 35-44   | 45-54  | 55-64  | 65+   | All Ages  |
| 1    | Congenital<br>Anomalies<br>22,379         | Unintentional<br>Injury<br>6,713              | Unintentional<br>Injury<br>4,681              | Unintentional<br>Injury<br>6,157              | Unintentional<br>Injury<br>60,544             | Unintentional<br>Injury<br>49,981 | Unintentional<br>Injury<br>65,892               | Neoplasms  | Malignant<br>Neoplasms<br>376,262                | Heart<br>Disease<br>2,255,723                     | Heart<br>Disease<br>2,734,664                     |
| 2    | Short<br>Gestation<br>18,538              | Anomalies                                     | Malignant<br>Neoplasms<br>2,072               | Malignant<br>Neoplasms<br>2,103               | Homicide<br>20,969                            | Suicide<br>20,255                 | Malignant<br>Neoplasms<br>62,886                |  | Heart<br>Disease<br>255,393                      | Malignant<br>Neoplasms<br>1,555,973               | Malignant<br>Neoplasms<br>2,221,829               |
| 3    | SIDS<br>8,937                             | Malignant<br>Neoplasms<br>1,613               | Congenital<br>Anomalies<br>766                | Suicide<br>1,059                              | Suicide<br>16,285                             | Homicide<br>18,704                | Heart<br>Disease<br>53,539                      | Unintentional<br>Injury<br>60,798                | Chronic Low.<br>Respiratory<br>Disease<br>46,277 | Cerebro-<br>vascular<br>556,451                   | Cerebro-<br>vascular<br>633,973                   |
| 4    | Maternal<br>Pregnancy<br>Comp.<br>6,632   | Homicide<br>1,591                             | Homicide<br>521                               | Homicide<br>814                               | Malignant<br>Neoplasms<br>6,794               | Malignant<br>Neoplasms<br>15,240  | Suicide<br>26,726                               | Liver<br>Disease<br>29,437                       | Diabetes<br>Mellitus<br>41,103                   | Chronic Low.<br>Respiratory<br>Disease<br>429,553 | Chronic Low.<br>Respiratory<br>Disease<br>496,198 |
| 5    | Placenta<br>Cord<br>Membranes<br>4,187    | Heart<br>Disease<br>763                       | Heart<br>Disease<br>377                       | Congenital<br>Anomalies<br>802                | Heart<br>Disease<br>4,192                     |                                   | HIV<br>21,740                                   | Suicide<br>25,637                                | Cerebro-<br>vascular<br>39,417                   | Alzheimer's<br>Disease<br>239,661                 | Unintentional<br>Injury<br>429,568                |
| 6    | Unintentional<br>Injury<br>3,919          |   | Influenza<br>& Pneumonia<br>192               | Heart<br>Disease<br>659                       | Congenital<br>Anomalies<br>1,931              | HIV<br>6,996                      | Homicide<br>13,601                              | Cerebro-<br>vascular<br>24,273                   | Unintentional<br>Injury<br>34,824                | Influenza<br>& Pneumonia<br>224,774               | Diabetes<br>Mellitus<br>291,978                   |
| 7    | Respiratory<br>Distress<br>3,660          | Septicemia<br>356                             | Benign<br>Neoplasms<br>175                    | Chronic Low.<br>Respiratory<br>Disease<br>312 | Cerebro-<br>vascular<br>799                   | Diabetes<br>Mellitus<br>2,493     | Liver<br>Disease<br>12,309                      |  | Liver<br>Disease<br>24,844                       | Diabetes<br>Mellitus<br>217,297                   | Influenza<br>& Pneumonia<br>252,542               |
| 8    | Bacterial<br>Sepsis<br>3,044              | Perinatal<br>Period<br>277                    | Chronic Low.<br>Respiratory<br>Disease<br>166 | Influenza<br>& Pneumonia<br>220               | HIV<br>772                                    | Cerebro-<br>vascular<br>2,318     | Cerebro-<br>vascular<br>9,737                   | HIV<br>17,458                                    | Suicide<br>14,789                                | Nephritis<br>137,796                              | Alzheimer's<br>Disease<br>242,140                 |
| 9    | Circulatory<br>System<br>Disease<br>2,473 | Benign<br>Neoplasms<br>222                    | Septicemia<br>148                             | Cerebro-<br>vascular<br>183                   | Influenza<br>& Pneumonia<br>757               | Anomalies                         | Diabetes<br>Mellitus<br>8,197                   | Chronic Low.<br>Respiratory<br>Disease<br>13,847 | Nephritis<br>14,508                              | Unintentional<br>Injury<br>135,690                | Nephritis<br>165,387                              |
|      | Intrauterine<br>Hypoxia<br>2,205          | Chronic Low.<br>Respiratory<br>Disease<br>211 | Cerebro-<br>vascular<br>134                   | Benign<br>Neoplasms<br>182                    | Chronic Low.<br>Respiratory<br>Disease<br>733 | Disease                           | Influenza<br>& Pneumonia<br>3,837               | Viral<br>Hepatitis<br>8,876                      | Septicemia<br>13,867                             | Septicemia<br>104,177                             | Septicemia<br>133,545                             |
| 11   | Neonatal<br>Hemorrhage<br>2,105           | Cerebro-<br>vascular<br>194                   | Anemias<br>95                                 | Septicemia<br>159                             | Diabetes<br>Mellitus<br>643                   | Influenza<br>& Pneumonia<br>1,360 | Chronic Low.<br>Respiratory<br>Disease<br>3,814 |  | Influenza<br>& Pneumonia<br>11,975               | Hypertension<br>72,018                            | Suicide<br>126,200                                |

(Source: CDC, WISQARS)

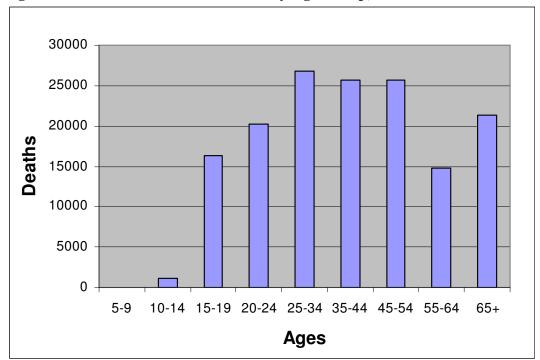


Figure 1: United States Suicide Deaths by Age Group, 2001-2004

(Source: CDC, WISQARS)

#### Suicide in Indiana

Suicide death data come from the Indiana State Department of Health (ISDH) mortality reports and differ slightly from the nationally-based reporting system, the National Center for Health Statistics (NCHS). The number of Indiana deaths reported by the ISDH is lower than the numbers from NCHS, because ISDH does not always receive death certificates for Indiana residents that died out of state. However, these deaths are likely to be reported to NCHS from those health departments, and NCHS would usually be able to assign state of residence, making the nationally-based data more complete than the health department data. Also completeness of mortality data is dependent upon how thoroughly the death certificate is completed which affects how a death is categorized. Another limitation is that race/ethnicity data is not very accurate. Race/ethnicity is at the discretion of the person filling out the death certificate and may not reflect how individuals would define their own race.

From 2001-2005, 17,232 Hoosiers died from injuries, an average of nine people each day. While 64% of the injury deaths were unintentional (accidental), **21% of the deaths resulted from suicide**, 11% from homicide, and 3% were undetermined (Figure 2). (6)

Between 2001 and 2004, there were 2,898 suicides in Indiana making suicide the 11<sup>th</sup> leading cause of death among Hoosiers (Table 2). The number of deaths for 10-24 year olds was 381 (6.88 per 100,000), 2,097 (16.52 per 100,000) for 25-65 year olds and 419 (13.64 per 100,000) for those 65 years and older. **The overall suicide rate in Indiana was higher than the U.S.** 

<u>and Midwest rates.</u> When comparing age groups, Indiana suicide death rates were slightly higher than the U.S. rates in all age categories except for those over 65 years of age (Table 3).

In 2005, suicide took the lives of 735 Hoosiers at a rate of 11.7 per 100,000 population. Between 2001 and 2005, there were 3,595 suicides, making suicide the 11<sup>th</sup> leading cause of death for that time period. During this time, suicide was the second leading cause of death in the 25-34 age group, the third leading cause of death among those 15-24 years of age, and fourth among those 35-44 years of age, and the fifth cause of death for 10-14 year olds. The majority of the deaths occurred in those aged 35-44 years (789 suicides) followed by those aged 45-54 years (761 suicides) and aged 25-34 years (632 suicides) (Figure 3). (6)

National statistics show that males die by suicide more frequently than females. This is also true in Indiana. From 2001 to 2005, the suicide death rate for male Hoosiers was 19.81 per 100,000 and for females it was 4.24 per 100,000. Male suicide rates over the years have been consistently four to five times greater than female suicide rates (Figure 4).

From 2001 to 2005, 94% of suicides deaths in Indiana were by white Hoosiers. Whites (12.21 per 100,000) surpassed blacks (7.01 per 100,000), Asian/Pacific Islanders (5.74 per 100,000), and American Indian/Alaska Natives (2.01 per 100,000) in numbers of suicides completed during 2001 to 2005 (Figure 5). There were more suicide deaths among white males compared to all other race/gender categories (Figure 6). When comparing age groups, white males aged 35-44 years and those aged 45-54 years had the highest numbers at 574 deaths in each age category (Figure 7). However, when comparing rates, black male Hoosiers aged 20-34 years had the third highest rate of suicide after white males over 65 years of age or older and white males aged 45-54 years (Figure 8).

Of the 3,595 Indiana suicides from 2001-2005, the manner that Hoosiers died by suicide included 57% by firearm, 21% by suffocation, 17% by poisoning, and 5% by other methods (Figure 9). The most common method of male suicide was firearms (11.8 per 100,000) followed by suffocation (4.3 per 100,000) and poisoning (2.3 per 100,000). White males died by suicide using firearms at a rate of 12.71 per 100,000 population compared to black males at a rate of 8.14 per 100,000. Females died by suicide more frequently by poisoning (1.7 per 100,000) than by firearms (1.6 per 100,000) or by suffocation (0.60 per 100,000). White females were more likely to commit suicide by poisoning (1.87 per 100,000) than by firearms (1.66 per 100,000) or suffocation (0.65 per 100,000) and have higher rates in all categories compared to black females (Table 4).

Table 2: Eleven Leading Causes of Death, Indiana 2001-2004, All Races, Both Sexes\*

|            |  |   | Leading                                     | Causes 01                                   | Deam, II                                     | iuiaiia 20                     | 01-2004,                                     | All Kaces                        | s, Dom Se                                       | XES  |  |
|------------|--|---|---|---|--|--------------------------------|--|----------------------------------|---|--|--|
|            | Age Grou                               | ıps   | <u> </u>                                    |   |  |                                |  |                                  |   |  |  |
| Rank       | <1                                     | 1-4   | 5-9   | 10-14                                       | 15-24  | 25-34                          | 35-44  | 45-54                            | 55-64   | 65+  | All Ages   |
| . <u>1</u> | Congenital<br>Anomalies<br>558         | Unintentional<br>Injury<br>164              | Unintentional<br>Injury<br>99               | Unintentional<br>Injury<br>120              | Unintentional<br>Injury<br>1,411             | Unintentional<br>Injury<br>910 | Malignant<br>Neoplasms<br>1,430              | Neoplasms                        | Malignant<br>Neoplasms<br>8,851                 | Heart<br>Disease<br>49,630                       | Heart<br>Disease<br>61,106                       |
| 2          | Short<br>Gestation<br>465              |   | Malignant<br>Neoplasms<br>48                | Malignant<br>Neoplasms<br>41                | Homicide<br>425                              | Suicide<br>524                 | Heart<br>Disease<br>1,359                    | Disease                          | Heart<br>Disease<br>5,978                       | Malignant<br>Neoplasms<br>35,743                 | Malignant<br>Neoplasms<br>51,181                 |
| <u>.</u> 3 | SIDS<br>175                            | Homicide<br>55                              | Congenital<br>Anomalies<br>17               | Homicide<br>21                              | Suicide<br>365                               | Homicide<br>385                | Unintentional<br>Injury<br>1,163             | Unintentional<br>Injury<br>1,110 | Chronic Low.<br>Respiratory<br>Disease<br>1,238 | Cerebro-<br>vascular<br>12,952                   | Cerebro-<br>vascular<br>14,675                   |
| 4          | Maternal<br>Pregnancy<br>Comp.<br>151  | Malignant<br>Neoplasms<br>40                | Homicide<br>11                              | Heart<br>Disease<br>19                      | Malignant<br>Neoplasms<br>146                | Heart<br>Disease<br>327        | Suicide<br>653                               |                                  | Diabetes<br>Mellitus<br>897                     | Chronic Low.<br>Respiratory<br>Disease<br>10,888 | Chronic Low.<br>Respiratory<br>Disease<br>12,683 |
| .5<br>.5   | Unintentional<br>Injury<br>151         | Heart<br>Disease<br>13                      | Heart<br>Disease<br>8                       | Suicide<br>16                               | Heart<br>Disease<br>103                      | Malignant<br>Neoplasms<br>315  | Homicide<br>251                              |                                  | Cerebro-<br>vascular<br>880                     | Alzheimer's<br>Disease<br>5,718                  | Unintentional<br>Injury<br>8,924                 |
|            | Placenta<br>Cord<br>Membranes<br>97    | Influenza<br>& Pneumonia<br>9               | Cerebro-<br>vascular<br>4                   | Congenital<br>Anomalies<br>11               | Congenital<br>Anomalies<br>34                | HIV<br>58                      | Liver<br>Disease<br>222                      | Cerebro-<br>vascular<br>523      | Unintentional<br>Injury<br>657                  | Diabetes<br>Mellitus<br>5,148                    | Diabetes<br>Mellitus<br>6,769                    |
| <u>7</u>   | Bacterial<br>Sepsis<br>79              | Septicemia<br>9                             | Influenza<br>& Pneumonia<br>4               | Chronic Low.<br>Respiratory<br>Disease<br>7 | Cerebro-<br>vascular<br>26                   | Diabetes<br>Mellitus<br>56     | Cerebro-<br>vascular<br>214                  | Mellitus                         | Liver<br>Disease<br>415                         | Influenza<br>& Pneumonia<br>4,474                | Alzheimer's<br>Disease<br>5,773                  |
| -<br>-8    | Respiratory<br>Distress<br>74          | Perinatal<br>Period<br>8                    | Meningitis<br>4                             | Septicemia<br>6                             | Influenza<br>& Pneumonia<br>26               | Cerebro-<br>vascular<br>53     | HIV<br>196                                   |                                  | Nephritis<br>386                                | Nephritis<br>4,164                               | Influenza<br>& Pneumonia<br>5,045                |
| .9         | Intrauterine<br>Hypoxia<br>57          | Cerebro-<br>vascular<br>5                   | Chronic Low.<br>Respiratory<br>Disease<br>3 | Diabetes<br>Mellitus<br>3                   | Chronic Low.<br>Respiratory<br>Disease<br>22 | Congenital<br>Anomalies<br>38  | Diabetes<br>Mellitus<br>167                  | Septicemia<br>203                |   | Unintentional<br>Injury<br>3,138                 | Nephritis<br>4,850                               |
| .10        | Circulatory<br>System<br>Disease<br>56 | Chronic Low.<br>Respiratory<br>Disease<br>5 | Four<br>Tied<br>2                           | Influenza<br>& Pneumonia<br>3               | Septicemia<br>21                             | Septicemia<br>30               | Chronic Low.<br>Respiratory<br>Disease<br>93 | Nephritis<br>183                 | Suicide<br>315                                  | Septicemia<br>2,545                              | Septicemia<br>3,297                              |
| .11        | Neonatal<br>Hemorrhage<br>46           | Meningitis<br>5                             | Four<br>Tied<br>2                           | Two<br>Tied<br>2                            | Diabetes<br>Mellitus<br>12                   | Two<br>Tied<br>25              | Influenza<br>& Pneumonia<br>91               | Homicide<br>171                  | Influenza<br>& Pneumonia<br>254                 | Parkinson's<br>Disease<br>1,624                  | Suicide<br>2,898                                 |
| -          |  |   |   |   |  |                                |  |                                  |   |  |  |

<sup>\*2005</sup> data for Indiana from the CDC was not available at time of report publication.

(Source: CDC, WISQARS)

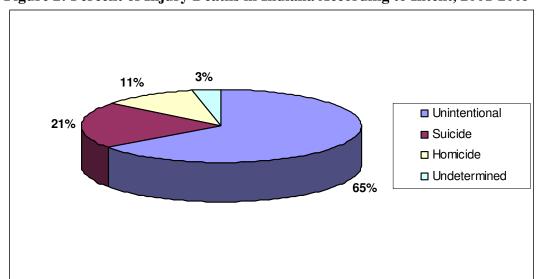


Figure 2: Percent of Injury Deaths in Indiana According to Intent, 2001-2005

Table 3: Comparison of Suicide Rates, 2001-2004\*

| Age<br>in | <u>Indiana</u> | United<br>States | Northeast | South  | West   | Midwest |
|-----------|----------------|------------------|-----------|--------|--------|---------|
| Years     | Number         | Number           | Number    | Number | Number | Number  |
|           | <u>Death</u>   | Death            | Death     | Death  | Death  | Death   |
|           | Rate**         | Rate**           | Rate**    | Rate** | Rate** | Rate**  |
| 10-24     | 381            | 17344            | 4203      | 6445   | 4370   | 2326    |
|           | 6.88           | 6.89             | 7.28      | 7.08   | 7.43   | 5.25    |
|           |                |                  |           |        |        |         |
| 25-64     | 2097           | 87407            | 19462     | 33961  | 21842  | 12142   |
|           | <u>16.52</u>   | 14.83            | 14.33     | 15.63  | 15.82  | 10.44   |
|           |                |                  |           |        |        |         |
| 65+       | <u>419</u>     | 21387            | 4251      | 8633   | 5715   | 2788    |
|           | <u>13.64</u>   | 14.89            | 12.70     | 16.87  | 19.68  | 9.34    |
|           |                |                  |           |        |        |         |
| Total     | 2898           | 126200           | 27924     | 49064  | 31945  | 17267   |
|           | 11.78          | 10.82            | 10.61     | 11.77  | 12.29  | 7.72    |
|           |                |                  |           |        |        |         |

<sup>\* 2005</sup> United States data was not available at the time of report publication.

<sup>\*\*</sup>Rates are per 100,000 population and are age-adjusted (Source: CDC, WISQARS)

**Deaths** 45.54 Age

Figure 3: Indiana Suicide Deaths by Age Group, 2001-2005

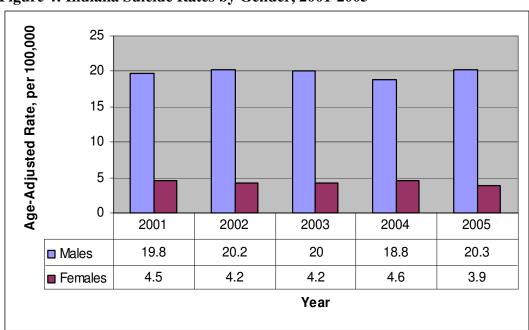


Figure 4: Indiana Suicide Rates by Gender, 2001-2005

(Source: Indiana State Department of Health, Mortality Reports, 1990-2005)

14 12.2 Age-Adjusted Rate, 12 per 100,000 10 7.01 8 5.74 6 4 2.01 2 0 White Black Asian American Indian **Race** 

Figure 5: Indiana Suicide Rates by Race, 2001-2005

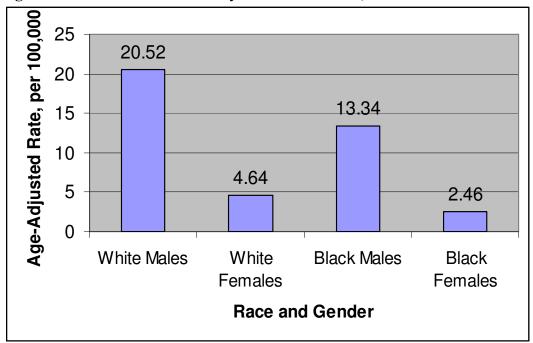


Figure 6: Indiana Suicide Rates by Race and Gender, 2001-2005

(Source: Indiana State Department of Health, Mortality Reports, 2001-2005)

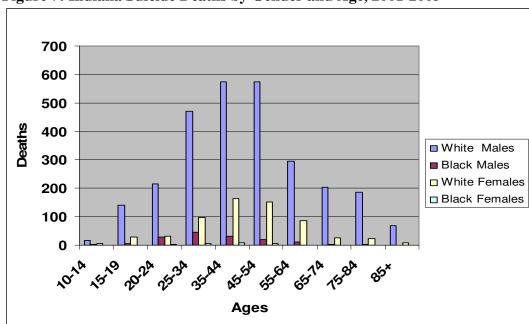


Figure 7: Indiana Suicide Deaths by Gender and Age, 2001-2005

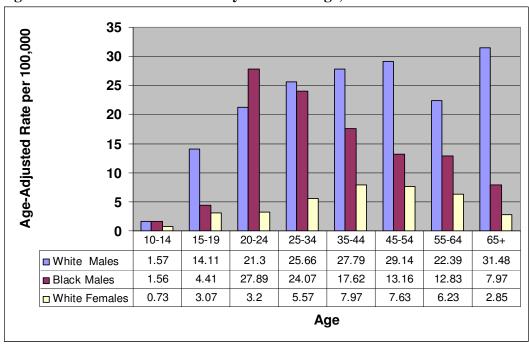


Figure 8: Indiana Suicide Rates by Race and Age, 2001-2005

(Source: Indiana State Department of Health, Mortality Reports, 2001-2005)

<sup>\*</sup>Black Females not included due to all age categories having less than 20 deaths and therefore unstable rates.

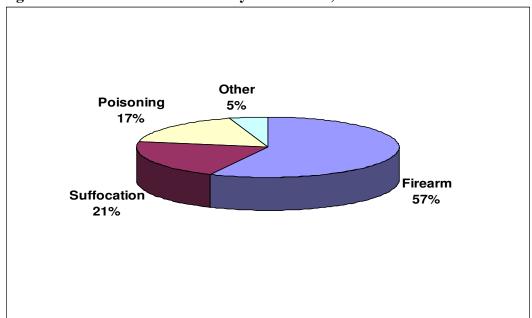


Figure 9: Indiana Suicide Deaths by Mechanism, 2001-2005

Table 4: Indiana Suicide Rates by Mechanism, Race and Gender, 2001-2005

| Mechanism   | White Males | Black Males | White Females | Black Females |
|-------------|-------------|-------------|---------------|---------------|
|             | Number      | Number      | Number        | Number        |
|             | Death Rate* | Death Rate* | Death Rate*   | Death Rate*   |
| Firearms    | 1688        | 99          | 234           | **            |
|             | 12.71       | 8.14        | 1.66          |               |
| Suffocation | 607         | 35          | 90            | **            |
|             | 4.49        | 2.70        | 0.65          |               |
| Poisoning   | 338         | **          | 261           | **            |
| _           | 2.49        |             | 1.87          |               |

<sup>\*</sup>Rates are per 100,000 population and are age-adjusted

(Source: Indiana State Department of Health, Mortality Reports, 2001-2005)

#### **Suicide Survivors**

The designation of "survivor of suicide" refers to the family and friends who are directly affected and impacted by the suicide death of their loved one. This definition does not represent all the people affected by the suicide (e.g. school, church, community, etc.) but those considered family and close friends. Survivors represent "the largest mental health casualties related to suicide" due to in part that survivors themselves are at an increased risk of suicide. Numbers of survivors are difficult to determine, however it is estimated that each suicide intimately affects at least six other people. If there is a suicide every 16 minutes, then there are six new survivors during that

<sup>\*\*</sup>Suicide deaths 20 or fewer do not produce stable rates and therefore are not included.

same time frame. <sup>(5)</sup> Based on this estimate, from 2001 to 2005, there were 21,570 suicide survivors in Indiana.

# **Suicide Attempts in the United States**

In 2002, more than 132,000 Americans were hospitalized following a suicide attempt, and over 116,000 people were treated in U.S. hospital emergency departments after attempting to take their own lives. However, there are no official national statistics on attempted suicide, because not all attempts require medical attention and some that do require medical intervention may not be properly identified as suicide attempts. It is generally estimated that there are 25 attempts for each suicide death. Based on this estimate, approximately 3.15 million suicide attempts were made in the U.S. between 2001 and 2004. Suicide attempts are greatest among females and the young. Ratios of attempted to completed suicides for youth are estimated to range between 100 to 1 and 200 to 1. Whites are known to attempt suicide at higher rates than other races with white females attempting suicide three times more often than white males.

## **Suicide Attempts in Indiana**

Hospital discharge data give an indication of the number of attempted suicides in Indiana although the data have limitations. The International Classification of Disease Revision 9 Clinical Modification (ICD-9CM) coding scheme includes external causes of injury codes or Ecodes that indicate the source or cause of the injury and can also provide injury-related cost data. However, E-codes are not mandated by law in Indiana, and it is estimated that only 55% of the discharge records contain them. Therefore, the total number of attempts is a gross underestimation of the proportion of actual suicide attempts.

E-codes specific to suicide or attempted suicide (self-inflicted injuries specified as intentional) include E950-E959. However, the data are not sensitive enough to distinguish which self-inflicted injuries are related to a self-mutilation disorder versus attempted suicides. Also, the hospital data base does not contain a patient-specific unique identifier meaning that it does not distinguish whether one person had five visits or whether five people visited once. Therefore, **statistics only reflect visits and not specific numbers of people.** Also race/ethnicity data is not very accurate because race/ethnicity is at the discretion of the person reporting the data and may not reflect how the individuals would define themselves.

A final limitation of the hospital discharge data is that the Indiana law only requires hospital discharge data submission by acute care hospitals. Therefore, a few psychiatric and behavioral health hospitals do not submit data. All acute care hospitals are submitting inpatient data. However, one of the three Level 1 Trauma center hospitals has not submitted outpatient/emergency department data yet. As a result, the total number of attempts for the outpatient/emergency department data is an underestimation of the actual number of suicide attempts and should be used with caution.

#### **Hospital Inpatient Data**

The 2003-2005 Indiana inpatient hospital discharge dataset totaled 2,367,934 records. Of these, 94,266 had a principle diagnosis for injury and poisoning (ICD-9-CM codes 800-999). A query was done for suicide related E-codes, yielding over 7% (6,894) of patients with self-inflicted injuries specified as injuries in suicide or attempted suicide. The average age for suicide attempts was 35 years old. Fifty-nine percent (4075 out of 6,894) of the attempts were made by females, and 41% (2,819 out of 6,894) of attempts were made by males. White females had the highest rate of injury among ages 25-44 year olds. However, black females had a higher rate of self-inflicted injury compared to white females in age groups 15-19 and 20-24. Among the age group 45-54, black males had the highest rate of injury (Figure 10).

Seventy-nine percent of the patients were admitted to inpatient care from emergency departments/outpatient centers. Patients were also admitted to hospitals from routine office visits (16%), transferred from other hospitals (4%), and other (0.6%). The majority of patients were admitted as an emergency (76%) followed by those classified as "urgent" (14%). Eight percent of patients admitted themselves to the hospital. Fifty-three percent of the patients were hospitalized for one day (mean = 2; median = 1; range = 1 to 71). Critical care days, meaning the number of days a patient spent in either an intensive care unit, critical care unit, or other specialized intensive care unit of a facility during hospitalization ranged from 0 to 49 days with 47% of the patients requiring at least one day of critical care. (7)

Although detailed analysis by cost is unavailable, 34.7% of patients identified Medicare and/or Medicaid and 41% identified managed care organizations and/or commercial insurance as their primary source of payment (Table 5). The median total cost in Indiana for the 6,894 self-inflicted injuries was \$5,433.00 (Range \$0.00 - \$356,110) for the three-year period. The total charges for all inpatient care related to self-inflicted injuries for 2003-2005 was \$58 million.

Table 6 shows a listing of all the E-codes associated with suicide attempts including the methods or cause of suicide attempt. The overwhelming majority of hospital admissions for attempted suicide involved self-inflicted poisoning by solid or liquid substances (93% or 6,405 incidents). The most frequently occurring method of poisoning was by benzodiazepine-based tranquilizers (chlordiazepoxide, diazepam, flurazepam, lorazepam, medazepam, and nitrazepam) at 17.8%, analgesics (pain relievers) at 14.7%, and antidepressants (amitriptyline, imipramine, and monoamine oxidase [MAO] inhibitors) at 13.0% (Table 7).

Other methods of attempting suicide included cutting or piercing (2.9% or 199 incidents) and use of firearms or explosives (1.7% or 120 incidents). Hospitalizations for suicide attempts by firearm are low, because these types of injuries are most times fatal. Suicide attempts by self-inflicted poisonings from gases such as carbon monoxide, hanging or strangulation, jumping from high places, or other unspecified means each involved less than 2.6% of hospital admissions for suicide attempts (Table 6). (7)

Figure 10: Indiana Self-inflicted Injuries Specified by Age and Race, 2003-2005 Hospital Inpatient Data

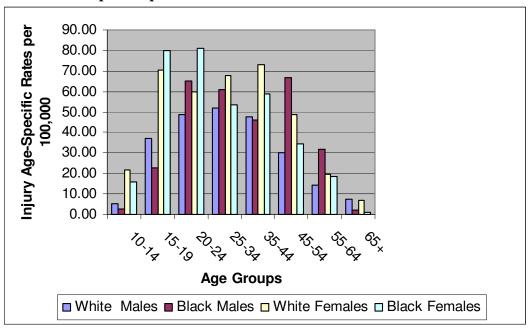


Table 5: Indiana Primary Payor of Hospitalization, 2003-2005 Hospital Inpatient Data

| Primary Payor        | Frequency | Percent |  |
|----------------------|-----------|---------|--|
| Commercial Insurance | 1740      | 25.2    |  |
| Medicaid             | 1593      | 23.1    |  |
| Self-Pay             | 1319      | 19.1    |  |
| Managed Care         | 1089      | 15.8    |  |
| Medicare             | 796       | 11.5    |  |
| Unknown              | 189       | 2.7     |  |
| Other Government     | 168       | 2.4     |  |

(Source: Indiana State Department of Health, Injury Prevention Program)

Table 6: Summary of E-code Distribution for Indiana Suicide Attempts, 2003-2005 Hospital Inpatient Data

| ECODE  | Description                                       | Frequency | Percent |
|--------|---|-----------|---------|
| E950   | Suicide and self-inflicted poisoning by solid or  | 6405      | 93.0    |
|        | liquid substance                                  |           |         |
| E950.3 | Tranquilizers and other psychotropic agents       | 2624      |         |
| E950.0 | Analgesics, antipyretics, and antirheumatics      | 1815      |         |
| E950.4 | Other specified drugs and medicinal substances    | 1354      |         |
| E950.9 | Other and unspecified solid and liquid substances | 208       |         |
| E950.2 | Other sedatives and hypnotics                     | 199       |         |

<sup>\*</sup>Rates are unstable for black males in age groups 10-14, 15-19, 55-64, and 65+; Rates are unstable for black females in age groups 10-14, 55-64, and 65+

| E950.5                     | Unspecified drug or medicinal substance                                 | 115 |      |
|----------------------------|---|-----|------|
| E950.1                     | Barbiturates  | 32  |      |
| E950.7                     | Corrosive and caustic substances (Suicide and                           | 37  |      |
|                            | self-inflicted poisoning by substances classifiable                     |     |      |
|                            | to E846)  |     |      |
| E950.6                     | Agricultural and horticultural chemical and                             | 20  |      |
|                            | pharmaceutical preparations other than plant                            |     |      |
|                            | foods and fertilizers   |     |      |
| E950.8                     | Arsenic and its compounds   | 1   |      |
| E951                       | Suicide and self-inflicted poisoning by gases                           | 3   | <0.1 |
|                            | in domestic use   |     |      |
| E951.0                     | Gas distributed by pipeline   | 1   |      |
| E951.1                     | Liquefied petroleum gas distributed in mobile                           | 2   |      |
|                            | containers  |     |      |
| E951.8                     | Other utility gas   | 0   |      |
| E952                       | Suicide and self-inflicted poisoning by other                           | 49  | 0.7  |
|                            | gases and vapors  |     |      |
| E952.0                     | Motor vehicle exhaust gas   | 38  |      |
| E952.1                     | Other carbon monoxide   | 2   |      |
| E952.8                     | Other specified gases and vapors  | 8   |      |
| E952.9                     | Unspecified gases and vapors  | 1   |      |
| E953                       | Suicide and self-inflicted injury by hanging,                           | 34  | 0.5  |
|                            | strangulation, and suffocation  |     |      |
| E953.0                     | Hanging   | 30  |      |
| E953.1                     | Suffocation by plastic bag  | 1   |      |
| E953.8                     | Other specified means   | 3   |      |
| E953.9                     | Unspecified means   | 0   |      |
| E954                       | Suicide and self-inflicted injury by submersion                         | 4   | <0.1 |
| FOEE                       | [drowning]  | 120 | 1.7  |
| E955                       | Suicide and self-inflicted injury by firearms, air guns, and explosives | 120 | 1.7  |
| E955.0                     | Handgun   | 44  |      |
| E955.1                     | Shotgun   | 11  |      |
| E955.2                     | Hunting rifle   | 8   |      |
| E955.3                     | Military firearm  | 0   |      |
| E955.4                     | Other and unspecified firearm (Gunshot, not                             | 42  |      |
| 2000.1                     | otherwise specified; Shot, not otherwise specified)                     | 12  |      |
| E955.5                     | Explosives  | 0   |      |
| E955.6                     | Air gun (BB gun, Pellet gun)  | 2   |      |
| E955.7                     | Paintball gun   | 0   |      |
| E955.9                     | Unspecified   | 13  |      |
| E956                       | Suicide and self-inflicted injury by cutting and                        | 199 | 2.9  |
|                            | piercing instrument   |     |      |
| E957                       | Suicide and self-inflicted injury by jumping                            | 18  | 0.3  |
|                            | from high place   |     |      |
|                            | <b>.</b>  | +_  | _    |
| Ŀ957.0                     | Residential premises  | 8   |      |
| E957.0<br>E957.1           | Residential premises Other man-made structure                           | 9   |      |
| E957.0<br>E957.1<br>E957.2 | Residential premises Other man-made structure Natural site              | 9   |      |

| E958   | Suicide and self-inflicted injury by other and unspecified means                         | 62 | 0.9 |
|--------|--|----|-----|
| E958.0 | Jumping or lying before moving object  | 1  |     |
| E958.1 | Barns, fire  | 15 |     |
| E958.2 | Scald  | 0  |     |
| E958.3 | Extremes of cold   | 1  |     |
| E958.4 | Electrocution  | 2  |     |
| E958.5 | Crashing of motor vehicle  | 13 |     |
| E958.6 | Crashing of aircraft   | 0  |     |
| E958.7 | Caustic substances, except poisoning (Excludes poisoning by caustic substances [E950.7]) | 3  |     |
| E958.8 | Other specified means  | 21 |     |
| E958.9 | Unspecified means  | 6  |     |
| E959   | Late effects of self-inflicted injury*   | 0  | 0   |

Table 7: Five Most Frequently Reported ICD-9-CM Classification Codes Among Persons

Who Attempted Suicide in Indiana, 2003-2005 Hospital Inpatient Data

| ICD-9-CM<br>Code | Description   | Frequency | Percent* |
|------------------|---|-----------|----------|
| 969.4            | Benzodiazepine-based Tranquilizers<br>(chlordiazepoxide, diazepam, flurazepam,<br>lorazepam, medazepam, nitrazepam)   | 1230      | 17.8     |
| 965.4            | Aromatic Analgesics, Not Elsewhere Classified (acetanilid, paracetamol [acetaminophen], phenacetin [acetophenetidin]) | 1016      | 14.7     |
| 969.0            | Antidepressants (amitriptyline, imipramine, monoamine oxidase [MAO] inhibitors)                                       | 895       | 13.0     |
| 969.3            | Other antipsychotics, neuroleptics, and major tranquilizers   | 294       | 4.3      |
| 965.1            | Salicylates (acetylsalicylic acid [aspirin], salicylic acid salts)  | 244       | 3.5      |

<sup>\*</sup>Percent is based off of the total number of ICD-9-CM codes with a primary diagnosis of poisoning or injury

(Source: Indiana State Department of Health, Injury Prevention Program)

#### **Emergency Department Data**

The 2003-2005 Indiana emergency department (ED)/outpatient discharge dataset totaled 8,432,278 records. Of these, 1,466,623 had a principle diagnosis for injury and poisoning (ICD-9-CM codes 800-999). A query was done for suicide related E-codes, yielding 9,042 patients with self-inflicted injuries specified as injuries in suicide or attempted suicide. The average age of attempted suicide was 29. Sixty percent (5,386 out of 9,042) of the attempts were made by females and 40% (3,656 out of 9,042) were made by males. The largest numbers of injuries (32% or 2,872 incidents) were among white females age 15-19 years, 25-34 years, and 35-44 years which is expected since females attempt suicide more often than males. (7) White Females

had the highest rate of injuries due to attempted suicide compared to all other race/gender categories (Figure 11).

Seventy-seven percent of the patients were seen at ED/outpatient centers. Patients were also seen at routine outpatient visits (20%), transferred from other sources (0.2%), and other (2.4%). The type of admission for the majority of the patients (61%) was coded as an emergency. (7)

Although detailed analysis by cost is unavailable, 29.4% of patients identified Medicare and/or Medicaid and 41.8% identified Managed Care Organizations and/or commercial insurance as their primary source of payment (Table 8). The median total cost of Indiana residents with an Ecode indicating suicide at an emergency department/outpatient center for the three year period was \$1,467 (range \$0-48,774). The total charges for all emergency department care related to self-inflicted injuries for 2003-2005 was \$16.8 million. (7)

Table 9 shows a listing of all the E-codes associated with suicide attempts which describes the methods or cause of suicide attempt. The majority of hospital ED/outpatient visits for attempted suicide involved self-inflicted poisoning by solid or liquid substances (68.1% or 6,158 incidents). The most frequently occurring method of poisoning was by benzodiazepine-based tranquilizers (chlordiazepoxide, diazepam, flurazepam, lorazepam, medazepam and nitrazepam) at 12.5% and antidepressants (amitriptyline, imipramine, and monoamine oxidase [MAO] inhibitors) at 9.7% (Table 10).<sup>(7)</sup>

Other methods of attempting suicide included cutting or piercing (23.3% or 2,103 incidents) and use of firearms or explosives (1.1% or 99 incidents). Emergency department visits for suicide attempts by firearm are low, because these types of injuries are most times fatal. Suicide attempts by self-inflicted poisonings from gases such as carbon monoxide, hanging or strangulation, jumping from high places, or other unspecified means each involved less than 7.7% of hospital emergency department/outpatient visits for suicide attempts (Table 9). (7)

Figure 11: Indiana Self-inflicted Injuries Specified by Age and Race, 2003-2005 Hospital Outpatient Data

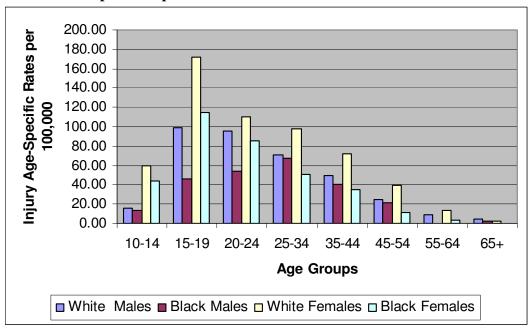


Table 8: Indiana Primary Payor of Hospitalization, 2003-2005 Hospital Outpatient Data

| Primary Payor        | Frequency | Percent |  |
|----------------------|-----------|---------|--|
| Commercial Insurance | 2546      | 28.1    |  |
| Self-Pay             | 2098      | 23.2    |  |
| Medicaid             | 1998      | 22.1    |  |
| Managed Care         | 1230      | 13.6    |  |
| Medicare             | 661       | 7.3     |  |
| Unknown              | 409       | 4.5     |  |
| Other Government     | 100       | 1.1     |  |

(Source: Indiana State Department of Health, Injury Prevention Program)

Table 9: Summary of E-code Distribution for Indiana Suicide Attempts, 2003-2005

**Hospital Outpatient Data** 

| ECODE  | Description   | Frequency | Percent |
|--------|---|-----------|---------|
| E950   | Suicide and self-inflicted poisoning by solid or liquid substance | 6158      | 68.1    |
| E950.3 | Tranquilizers and other psychotropic agents                       | 2412      |         |
| E950.0 | Analgesics, antipyretics, and antirheumatics                      | 1680      |         |
| E950.4 | Other specified drugs and medicinal substances                    | 1285      |         |
| E950.5 | Unspecified drug or medicinal substance                           | 246       |         |
| E950.2 | Other sedatives and hypnotics                                     | 245       |         |

<sup>\*</sup>Rates are unstable for black males in age groups 10-14, 55-64, and 65+; Rates are unstable for black females in age groups 45-54, 55-64, and 65+.

| E950.9           | Other and unspecified solid and liquid substances                    | 208  |      |
|------------------|--|------|------|
| E950.7           | Corrosive and caustic substances (Suicide and                        | 46   |      |
|                  | self-inflicted poisoning by substances classifiable                  |      |      |
|                  | to E846)   |      |      |
| E950.1           | Barbiturates   | 25   |      |
| E950.6           | Agricultural and horticultural chemical and                          | 11   |      |
|                  | pharmaceutical preparations other than plant                         |      |      |
|                  | foods and fertilizers  |      |      |
| E950.8           | Arsenic and its compounds  | 0    |      |
| E951             | Suicide and self-inflicted poisoning by gases                        | 8    | <0.1 |
|                  | in domestic use  | _    |      |
| E951.0           | Gas distributed by pipeline  | 2    |      |
| E951.1           | Liquefied petroleum gas distributed in mobile                        | 6    |      |
|                  | containers   |      |      |
| E951.8           | Other utility gas  | 0    |      |
| E952             | Suicide and self-inflicted poisoning by other                        | 95   | 1.1  |
|                  | gases and vapors   |      |      |
| E952.0           | Motor vehicle exhaust gas  | 71   |      |
| E952.1           | Other carbon monoxide  | 5    |      |
| E952.8           | Other specified gases and vapors                                     | 15   |      |
| E952.9           | Unspecified gases and vapors   | 4    |      |
| E953             | Suicide and self-inflicted injury by hanging,                        | 77   | 0.9  |
|                  | strangulation, and suffocation                                       |      |      |
| E953.0           | Hanging  | 70   |      |
| E953.1           | Suffocation by plastic bag   | 1    |      |
| E953.8           | Other specified means  | 5    |      |
| E953.9           | Unspecified means  | 1    |      |
| E954             | Suicide and self-inflicted injury by submersion [drowning]           | 0    | 0    |
| E955             | Suicide and self-inflicted injury by firearms, air                   | 99   | 1.1  |
|                  | guns, and explosives   |      |      |
| E955.0           | Handgun  | 34   |      |
| E955.1           | Shotgun  | 10   |      |
| E955.2           | Hunting rifle  | 6    |      |
| E955.3           | Military firearm   | 0    |      |
| E955.4           | Other and unspecified firearm (Gunshot, not                          | 24   |      |
|                  | otherwise specified; Shot, not otherwise specified)                  |      |      |
| E955.5           | Explosives   | 0    |      |
| E955.6           | Air gun (BB gun, Pellet gun)   | 13   |      |
| E955.7           | Paintball gun  | 0    |      |
| E955.9           | Unspecified  | 12   |      |
| E956             | Suicide and self-inflicted injury by cutting and piercing instrument | 2103 | 23.3 |
| E957             | Suicide and self-inflicted injury by jumping                         | 24   | 0.3  |
|                  | from high place  |      |      |
| E057.0           | <del>•</del> ·   | t    | +    |
| E957.0           | Residential premises   | 7    |      |
| E957.0<br>E957.1 | Residential premises Other man-made structure                        | 13   |      |
|                  |  |      |      |

| E958   | Suicide and self-inflicted injury by other and unspecified means                         | 471 | 5.2  |
|--------|--|-----|------|
| E958.0 | Jumping or lying before moving object  | 6   |      |
| E958.1 | Barns, fire  | 25  |      |
| E958.2 | Scald  | 0   |      |
| E958.3 | Extremes of cold   | 3   |      |
| E958.4 | Electrocution  | 2   |      |
| E958.5 | Crashing of motor vehicle  | 17  |      |
| E958.6 | Crashing of aircraft   | 0   |      |
| E958.7 | Caustic substances, except poisoning (Excludes poisoning by caustic substances [E950.7]) | 4   |      |
| E958.8 | Other specified means  | 343 |      |
| E958.9 | Unspecified means  | 71  |      |
| E959   | Late effects of self-inflicted injury*   | 7   | <0.1 |

Table 10: Five Most Frequently Reported ICD-9-CM Classification Codes Among Persons Who Attempted Suicide in Indiana, 2003-2005 Hospital Outpatient Data

| ICD-9-CM | Description   | Frequency | Percent* |
|----------|---|-----------|----------|
| Code     |   |           |          |
| 969.4    | Benzodiazepine-based tranquilizers (chlordiazepoxide, diazepam, flurazepam, lorazepam, medazepam, nitrazepam)         | 1127      | 12.5     |
| 969.0    | Antidepressants (amitriptyline, imipramine, monoamine oxidase [MAO] inhibitors)                                       | 876       | 9.7      |
| 881.02   | Open wound of wrist without mention of complication   | 834       | 9.2      |
| 965.4    | Aromatic Analgesics, Not Elsewhere Classified (acetanilid, paracetamol [acetaminophen], phenacetin [acetophenetidin]) | 617       | 6.8      |
| 881.0    | Open wound of elbow, forearm, and wrist   | 491       | 5.4      |

<sup>\*</sup>Percent is based off of the total number of ICD-9-CM codes with a primary diagnosis of poisoning or injury.

# **County-level Suicides and Suicide Attempts**

The numbers of suicide deaths and attempts in each Indiana County are displayed in Table 11 and are shown in map form in Figures 12 and 13. Average age-adjusted rates are shown in parenthesis for suicide deaths. However, <u>rates are not included for attempts due to the gross underestimation of the number of attempts related to only 55% of hospital discharge records having E-codes.</u>

Table 11: Suicide Deaths and Attempts by Indiana Counties, 2003-2005

| County | unty   County Name   Suicides (Age- Attempts*, |                |         |  |
|--------|--|----------------|---------|--|
| ID     |  | adjusted rate) | (*****) |  |
| 01     | ADAMS  | 12 (U)         | 10      |  |
| 02     | ALLEN  | 113 (11.20)    | 529     |  |
| 03     | BARTHOLOMEW                                    | 17 (U)         | 423     |  |
| 04     | BENTON   | **             | 30      |  |
| 05     | BLACKFORD                                      | **             | 81      |  |
| 06     | BOONE  | 17 (U)         | 54      |  |
| 07     | BROWN  | 7 (U)          | 25      |  |
| 08     | CARROLL  | **             | 47      |  |
| 09     | CASS   | 11 (U)         | 210     |  |
| 10     | CLARK  | 47 (15.40)     | 282     |  |
| 11     | CLAY   | 10 (U)         | 146     |  |
| 12     | CLINTON  | 21 (21.70)     | 229     |  |
| 13     | CRAWFORD                                       | 7 (U)          | 31      |  |
| 14     | DAVIESS  | 8 (U)          | 54      |  |
| 15     | DEARBORN                                       | 13 (U)         | 142     |  |
| 16     | DECATUR  | 7 (U)          | 95      |  |
| 17     | DEKALB   | 14 (U)         | 104     |  |
| 18     | DELAWARE                                       | 59 (16.64)     | 616     |  |
| 19     | DUBOIS   | 14 (U)         | 36      |  |
| 20     | ELKHART  | 48 (8.69)      | 601     |  |
| 21     | FAYETTE  | 8 (U)          | 90      |  |
| 22     | FLOYD  | 26 (12.29)     | 166     |  |
| 23     | FOUNTAIN                                       | 6 (U)          | 36      |  |
| 24     | FRANKLIN                                       | 7 (U)          | 26      |  |
| 25     | FULTON   | **             | 24      |  |
| 26     | GIBSON   | 12 (U)         | 114     |  |
| 27     | GRANT  | 31 (13.58))    | 186     |  |
| 28     | GREENE   | 20 (19.91)     | 38      |  |
| 29     | HAMILTON                                       | 50 (7.47)      | 452     |  |
| 30     | HANCOCK  | 20 (10.49)     | 56      |  |
| 31     | HARRISON                                       | 13 (U)         | 68      |  |
| 32     | HENDRICKS                                      | 35 (9.32)      | 191     |  |
| 33     | HENRY  | 23 (15.26)     | 171     |  |
| 34     | HOWARD   | 29 (10.81)     | 384     |  |

| County       | <b>County Name</b> | Suicides (Age-       | Attempts*, |
|--------------|--------------------|----------------------|------------|
| <b>ID</b> 35 | HUNTINGTON         | adjusted rate)       | 59         |
| 36           |                    | 14 (U)               | 144        |
| 37           | JACKSON<br>JASPER  | 15 (U)               | 36         |
| 38           |                    | 8 (U)                | 108        |
| 39           | JAY                | 12 (U)               |            |
| 40           | JEFFERSON          | 13 (U)               | 131<br>151 |
| 40           | JENNINGS           | 18 (U)               |            |
| 41           | JOHNSON            | 42 (11.18)           | 287        |
|              | KNOX               | 22 (19.08) 20 (8.51) | 175        |
| 43           | KOSCIUSKO          | 20 (8.31)            | 170        |
| 44           | LAGRANGE           |                      | 34         |
| 45           | LAROPTE            | 132 (9.17)           | 917        |
| 46           | LANDENGE           | 46 (14.13)           | 323        |
| 47           | LAWRENCE           | 18 (U)               | 149        |
| 48           | MADISON            | 61 (15.57)           | 226        |
| 49           | MARION             | 306 (11.87)          | 2,093      |
| 50           | MARSHALL           | 10 (U)               | 55         |
| 51           | MARTIN             |                      | 17         |
| 52           | MIAMI              | 13 (U)               | 149        |
| 53           | MONROE             | 31 (9.37)            | 171        |
| 54           | MONTGOMERY         | 17 (U)               | 67         |
| 55           | MORGAN             | 28 (13.33)           | 175        |
| 56           | NEWTON             | **                   | 15         |
| 57           | NOBLE              | 18 (U)               | 61         |
| 58           | OHIO               | **                   | 21         |
| 59           | ORANGE             | 6 (U)                | 64         |
| 60           | OWEN               | 10 (U)               | 38         |
| 61           | PARKE              | 8 (U)                | 23         |
| 62           | PERRY              | 6 (U)                | 57         |
| 63           | PIKE               | 7 (U)                | 30         |
| 64           | PORTER             | 59 (12.37)           | 307        |
| 65           | POSEY              | 12 (U)               | 73         |
| 66           | PULASKI            | **                   | 44         |
| 67           | PUTNAM             | 13 (U)               | 155        |
| 68           | RANDOLPH           | 13 (U)               | 61         |
| 69           | RIPLEY             | 7 (U)                | 79         |
| 70           | RUSH               | **                   | 57         |
| 71           | ST. JOSEPH         | 80 (10.17)           | 627        |
| 72           | SCOTT              | 12 (U)               | 193        |
| 73           | SHELBY             | 13 (U)               | 32         |
| 74           | SPENCER            | **                   | 35         |
| 75           | STARKE             | 11 (U)               | 113        |
| 76           | STEUBEN            | 13 (U)               | 44         |
| 77           | SULLIVAN           | 14 (U)               | 26         |

| County | County Name | Suicides (Age- | Attempts*, |
|--------|-------------|----------------|------------|
| ID     |             | adjusted rate) | (*****)    |
| 78     | SWITZERLAND | **             | 25         |
| 79     | TIPPECANOE  | 47 (10.32)     | 567        |
| 80     | TIPTON      | **             | 39         |
| 81     | UNION       | **             | 17         |
| 82     | VANDERBURGH | 85 (16.37)     | 806        |
| 83     | VERMILLION  | 6 (U)          | 13         |
| 84     | VIGO        | 51 (16.51)     | 256        |
| 85     | WABASH      | 10 (U)         | 41         |
| 86     | WARREN      | **             | 16         |
| 87     | WARRICK     | 13 (U)         | 185        |
| 88     | WASHINGTON  | 13 (U)         | 59         |
| 89     | WAYNE       | 31 (14.01)     | 238        |
| 90     | WELLS       | 9 (U)          | 19         |
| 91     | WHITE       | 7 (U)          | 62         |
| 92     | WHITLEY     | **             | 39         |
|        | TOTAL       |                | 15,921     |

<sup>\*</sup>Numbers based on hospital emergency department/outpatient center and inpatient data. Due to only 55% of hospital discharge records having E-codes, the numbers are a gross underestimation of the actual number of suicide attempts.

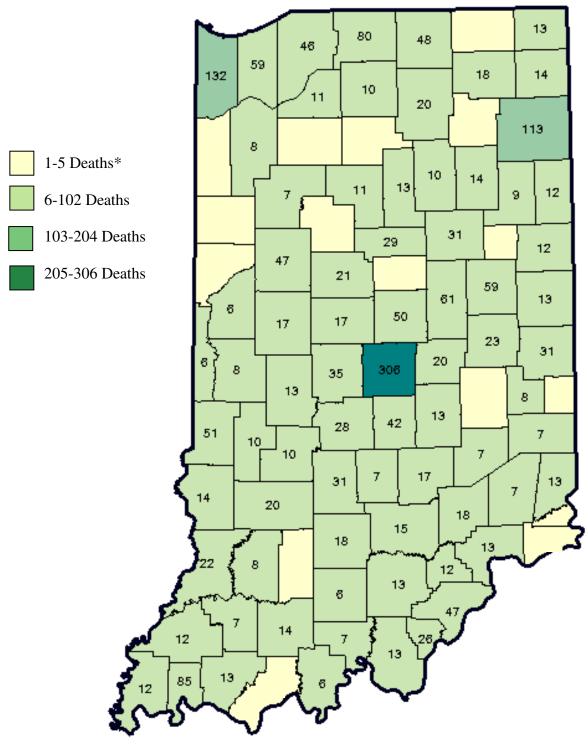
<sup>\*\*</sup>The number of suicide deaths was less than or equal to 5 and is suppressed to protect confidentiality.

<sup>\*\*\*</sup>Age adjusted rates are per 100,000 population and are calculated using the 2000 standard million population, U.S. Bureau of Census

<sup>\*\*\*\* &#</sup>x27;U' signifies that the age adjusted rates are unstable due to less than 20 deaths or attempts for the county

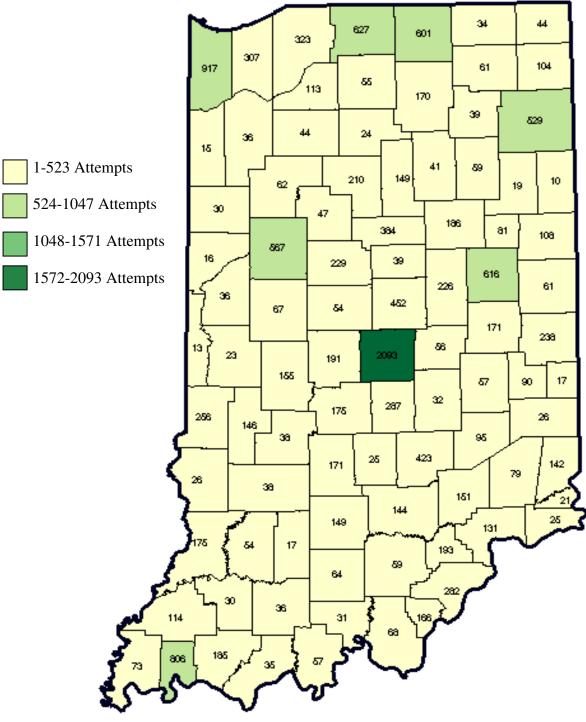
<sup>\*\*\*\*</sup> Age adjusted rates are not included for attempt data due to the gross underestimation of the number of attempts. Attempt data must be used with caution.





<sup>\*</sup>The number of suicide deaths was less than or equal to 5 and is suppressed to protect confidentiality.





<sup>\*</sup>Numbers based on hospital emergency department/outpatient center and inpatient data. Due to only 55% of hospital discharge records having E-codes, the numbers are a gross underestimation of the actual number of suicide attempts.

## **Youth Suicide Attempts**

## **Hospital Inpatient Data**

There were 1,004 youth (ages 10-19) who were treated in an inpatient setting for attempted suicide or self-inflicted injury (15% of the total number of patients seen for self-inflicted injury during 2003-2005). The majority (80%) of the 1,004 attempts were made by youth 15-19 years old. The median age was 17 (range 10-19) with 68% of the attempts by females. Seventy-seven percent of all youth patients seen for self-inflicted injury were white, involving 68% white females and 32% white males. Blacks accounted for 9% of youth attempted suicides and other races accounted for 14% of all youth attempted suicides.<sup>(7)</sup>

#### **Emergency Department Data**

The 2003-2005 hospital discharge dataset was reviewed for youth (ages 10-19) suicide attempts. Based on a query completed in the ED/outpatient center database, 2,530 youth patients attempted suicide or had injuries consistent with self-inflicted intentional injuries, which represented 28% of the total number of ED/outpatient center patients seen for self-inflicted injury. The majority (77%) of the 2,530 self-inflicted injuries were among youth 15-19 years old. The median age of attempted suicide was 16 (range 10-19) with 66% of the attempts made by females. More specifically, 80% of the attempts were made by youth of the white race, involving 66% white females and 34% white males. Blacks accounted for 6% of youth attempted suicide while other accounted for 14% of all youth attempted suicides.<sup>(7)</sup>

## **Behavior Survey Data**

The Youth Risk Behavior Survey (YRBS) was developed in 1990 to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth in the U.S. According to the 2003 and 2005 Indiana YRBS, the percentage of youth who reported having attempted suicide one or more times during the past 12 months increased from 6.6% to 9.6%. When comparing 2003 to 2005 data, students whose suicide attempts required medical attention increased from 1.6% to 3.5%. Both increases were statistically significant. In 2005, Indiana youth had a higher percentage of students who attempted suicide and attempted suicide which required medical attention when compared to the U.S. percentages (Table 12). (8)

Table 12: Indiana Youth Risk Behavior Survey Results, 2005

| Health-risk Behavior                    | United States    |             | Indiana          |             |
|---|------------------|-------------|------------------|-------------|
|   | Total<br>Percent | (95% CI)    | Total<br>Percent | (95% CI)    |
| Felt sad or hopeless                    | 28.5             | (27.3-29.7) | 27.3             | (23.9-30.7) |
| Seriously considered attempting suicide | 16.9             | (16.0-17.8) | 18               | (15.7-20.3) |
| Made a suicide plan                     | 13               | (12.1-13.9) | 14.8             | (12.2-17.4) |
| Attempted suicide                       | 8.4              | (7.5-9.3)   | 9.6              | (7.6-11.6)  |
| Needed medical treatment                | 2.3              | (1.9-2.7)   | 3.5              | (2.5-4.5)   |

(Source: Indiana Youth Risk Behavior Survey)

#### **Risk Factors**

Risk and protective factors and their interactions form the empirical base for suicide prevention. Variations in suicide rates between age, gender, ethnicity, and culture provide opportunities to understand the different factors that affect these groups. Risk factors involve genetic, neurobiological, psychological, social, and cultural characteristics and environmental factors. (3)

No single factor has gained acceptance as a universal cause of suicide. Some risk factors associated with a higher incidence of suicide include, but are not limited to, depression, mental illness, schizophrenia, drug and/or chemical dependency, conduct disorders (in adolescence), and chronic disease. Research findings from the American Association of Suicidology indicate that mental health diagnoses are generally associated with a higher rate of suicide. Psychological autopsy studies reflect that more than 90% of completed suicides had one or more mental health disorders including substance abuse. (5)

#### **Adults**

The risk of suicide is increased by more than 50% in depressed individuals, and aggregated research shows that about 60% of suicides were completed by depressed individuals. The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors for individuals 18 and older in the U.S. The BRFSS has been conducted yearly since 1984. The 2006 Indiana BRFSS Anxiety and Depression module showed that 18.5% of Hoosiers felt down, depressed or hopeless for 1-3 days in the past two weeks, 4.7% felt that way for 4-6 days, 3.3% for 7-10 days, and 3.5% for 11-14 days. However, the majority (70%) indicated that they did not feel down, depressed, or hopeless at all in the past two weeks. (9)

When asked "Over the last two weeks, how many days have you felt bad about yourself or that you were a failure or had let yourself or your family down?," 11.8% reported between 1-3 days, 2.6% reported between 4-6 days, 2.9% reported between 7-10 days, and 3.3% reported 11-14 days. The majority (79.3%) of the population said they did not feel that way about themselves. Of the surveyed population, 13.8% indicated that a doctor/healthcare provider told them they had an anxiety disorder (including acute stress disorder, anxiety, generalized anxiety disorder,

obsessive-compulsive disorder, panic disorder, phobia, posttraumatic stress disorder, or social anxiety disorder), and 19.8% had a doctor/healthcare provider tell them they had a depressive disorder (including depression, major depression, dysthymia, or minor depression). (9)

According to the 2006 Indiana BRFSS, 36.9% of individuals reported poor mental health, meaning they identified themselves as having stress, depression, and/or problems with emotions, for at least one day in the past 30 days. Females (56.2%) reported having more days of poor mental health than males (43.8%). Thirty-five percent of white respondents said they experienced poor mental health, 34.5% of blacks reported as such, 35.3% of those identified as "other" reported poor mental health, 58.1% of those considering themselves Multiracial (reporting two or more races) reported as such, and 27% of Hispanics reported poor mental health. Of respondents, 5.8% (44.8% males and 55.2% females) said they experienced poor mental health every day. (10) The elderly are particularly vulnerable to depression (22.5% of those 65 years and older reported having poor mental health) (9), accounting for one of the leading causes of suicide among that population. (5) Most elderly suicide victims are seen by their primary care provider a few weeks prior to their suicide attempt or completion but are not screened for depression. (1)

A relationship between alcohol and suicide exists such that the risk of suicide in alcoholics is 50-70% higher than for the general population. According to the 2006 Indiana BRFSS survey, 21% of males and 9.8% of females reported that they engage in binge drinking. Binge drinking is defined for males as having five or more drinks on one occasion in the past 30 days and for females it is having four or more drinks on one occasion in the past 30 days. Also, 5.8% of males reported heavy alcohol consumption (more than two drinks per day), and 4% of females reported heavy alcohol use. Although the above statistics are not a measure of alcoholism, they do describe alcohol use in general among Hoosiers. (10)

Other risk factors for suicide include social isolation, being divorced, separated, or widowed and suffering from a physical illness. When asked how often people get the social and emotional support they need, 47% responded "always", 33.5% responded "usually", 11.7% responded "sometimes", 3.5% responded "rarely", and 4.3% said "never." The elderly are especially susceptible to depression due to deteriorating physical health and loss of friends and/or spouse. Of those aged 65-74, 15.8% did not have good physical health 1-6 days in the previous month, 11.1% did not have good physical health 7-29 days of the previous month, and 7.8% did not have good physical health every day. Statistics were similar for those 75 years and older (19.6%, 12.8%, and 12.4%). Of adults 65-74, 19.9% reported their general health as fair, and 7.5% reported it as poor. Twenty-four percent of adults over 75 years of age reported their general health as fair, and 9.7% reported it as poor.

#### **Youth**

Youth risk factors include family history of suicide, suicide attempts, or mental illness, male gender, history of physical or sexual abuse, personal mental health problems and gay or bisexual orientation. Also, feelings of hopelessness are found to be predictive of suicide. The 2005 Indiana Youth Risk Behavior Survey (YRBS) indicates that 27.3% of high school students reported feeling sad or hopeless one or more times during the past 12 months (Table 12). A prior

suicide attempt is also a risk factor for eventual suicide completion. According to the YRBS, 9.6% of Indiana high school students reported that they attempted suicide in the previous 12 months. Eighteen percent of 9th through 12th grade Hoosiers seriously considered attempting suicide during the past 12 months, and approximately 15% of the students had a plan for how they would attempt suicide (Table 12).<sup>(8)</sup>

#### **Protective Factors**

Protective factors play an important role in understanding and preventing suicide. Protective factors can include an individual's genetic or neurobiological makeup, attitudinal and behavior characteristics, and environmental factors. Understanding the measures or factors that safeguard against suicide is essential to preventing suicide. Such factors include effective and appropriate clinical care for mental, physical, and substance abuse disorders, easy access to a variety of clinical interventions and support for seeking help, restricted access to highly lethal methods of suicide, and supportive family and community. Other protective factors include support from ongoing medical and mental health care relationships, skills in problem solving, conflict resolution, and nonviolent handling of disputes, and cultural/religious beliefs that discourage suicide and value life. (3)

#### **National Strategy for Suicide Prevention**

Suicide is a problem at both the local and national level. In 1999, the U.S. Surgeon General drew attention to the issue with his Call to Action which introduced an initial blue-print for reducing suicide and the mental and substance abuse disorders that often accompany suicide and suicide attempts. In 2001, aiming to move toward this nationwide model, a National Strategy for Suicide Prevention (NSSP) was implemented by the U.S. Department of Health and Human Services. The effective implementation of the National Strategy will play a critical role in reaching the suicide prevention goals outlined in the Nation's public health agenda, *Healthy People 2010*. (11)

The Healthy People 2010 objectives related to suicide are to decrease suicides from 11.3 suicides per 100,000 population to 5.0 per 100,000 population and to reduce the rate of suicide attempts by adolescents. The aims of NSSP are to prevent premature deaths due to suicide across the life span, to reduce the rates of other suicidal behaviors, and to reduce the harmful after-effects associated with suicidal behaviors and the traumatic impact of suicide on family and friends. The Strategy also focuses on promoting opportunities and settings to enhance resiliency, resourcefulness, respect, and interconnectedness for individuals, families, and communities. (11)

The risk factors that lead to suicide and factors that protect against suicide form the conceptual basis for the recommendations of the NSSP. The framework focuses on awareness, intervention, and methodology (AIM).<sup>(3)</sup>

Awareness involves appropriately broadening the public's awareness of suicide and its risk factors. Steps include:

- Promoting public awareness that suicide is a preventable public health problem
- Expanding awareness of enhancing resources
- Developing and implementing strategies to reduce the stigma associated with suicide, mental illness, and substance abuse (3)

Intervention focuses on enhancing population-based and clinical care services and programs. Steps include:

- Extending collaboration between public and private sectors
- Improving the ability of primary care providers to recognize and treat depression, substance abuse, and other major mental illness associated with suicide
- Eliminating barriers in insurance programs for mental illness treatment
- Instituting training for all health professionals regarding suicide risk assessment and recognition, treatment, management, and aftercare interventions
- Developing and implementing effective training programs for family members of those at risk
- Developing and implementing safe and effective programs in educational settings for youth that address adolescent distress, provide crisis intervention and incorporate peer support for seeking help
- Enhancing community care resources by increasing the use of schools and workplaces as access and referral points for mental illness and substance abuse treatment and provide support for suicide survivors
- Promoting a public/private collaboration with the media to assure that entertainment and news coverage represent balanced and informed portrayals of suicide (3)

Methodology involves advancing the science of suicide prevention. Steps involve:

- Enhancing research to understand suicide risk and protective factors and to determine effective programs
- Developing additional scientific strategies for evaluating suicide prevention interventions and ensure that evaluation components are included in suicide prevention programs
- Establishing mechanisms for interagency collaboration toward improving monitoring systems for suicide and suicidal behaviors
- Encouraging the development and evaluation of new prevention technologies (3)

In 2006, the Federal Substance Abuse and Mental Health Services Administration announced it was partnering with SPAN USA to create the National Action Alliance for Suicide Prevention, a public/private partnership to advance the National Strategy's objectives. The Action Alliance is expected to guide the nation's suicide prevention response by reframing the objectives as measurable actions, encouraging implementation and coordination, promoting evidence-based practices, and disseminating effective policies and programs. (12)

#### **Indiana Suicide Prevention Coalition**

In 2001, in response to the national call to action and the magnitude of the problem in Indiana, the Indiana Suicide Prevention Coalition (ISPC) was formed. To support ISPC's work, the Indiana State Department of Health gave the Coalition a grant in 2003. ISPC is actively working

to have all regions of the state as well as a variety of stakeholders including health, mental health, education, policy makers, coroner's office, the faith community, survivors of suicide, youth, elderly, people of diverse racial, ethnic, and gender backgrounds, and others represented on the Coalition.

The mission of ISPC is to coordinate, facilitate, advise, and provide resources to Indiana communities for activities that reduce deaths due to suicide, the occurrence of suicidal behaviors, and the effects of suicide on Indiana citizens. ISPC's on-going activities include coordinating information sharing via bi-monthly Coalition meetings, a listsery, and a statewide email list; facilitating the growth of local suicide prevention councils in counties and regions across Indiana; raising awareness of the prevalence of suicide, the devastating impact it has on families, and it's preventability; helping communities and organizations find and implement suicide prevention and intervention training; providing resources to organizations and community members regarding suicide facts, trends, events, and evidence-based programs.

The Coalition also aids schools in responding to suicidal students by both distributing a Youth Suicide Prevention School-Based Guide to help schools plan prevention, intervention, and post intervention efforts, and updating and distributing the Indiana Department of Education's Student Suicide manual used by Guidance Counselors and Social Workers. Past activities include conducting telephone surveys to determine Hoosiers' knowledge and awareness of suicide and suicide prevention to help refine Indiana's suicide prevention programs and surveying Indiana schools and youth-serving organizations' efforts regarding suicide prevention, intervention, and post intervention programs and services. (13)

In addition to this statewide coalition, Indiana has eleven local suicide prevention councils working in communities across the state to prevent suicide. The local/regional councils and coalitions around Indiana have developed in response to local needs (Allen County St. Joseph County, Dubois County, and Elkhart County) or via efforts by ISPC to bring together interested stakeholders to discuss suicide prevention efforts in their community (Vigo County, Southwestern Indiana, and Northwestern Indiana). The local/regional councils are engaged in different activities such as working with funeral directors to distributing awareness materials (Vigo County), building survivor resources (St. Joseph County), researching barriers to screening with physicians (Allen County), and training school staff in QPR (Question, Persuade, and Refer), a suicide prevention program, (Dubois County).

ISPC has a state suicide prevention plan that local/regional councils can use as a blue-print to shape their community plan. ISPC is available in an advisory capacity for the regional and county-level suicide prevention councils to offer resources and technical assistance in developing, implementing and evaluating their own suicide prevention strategies and plans. The Coalition also helps coordinate statewide efforts and resources, establish suicide prevention and intervention strategies, and document and monitor the implementation of the statewide plan for suicide prevention. (13)

A full listing of council locations and activities can be found on ISPC's website: <a href="http://www.indianasuicidepreventioncoalition.org/regional.htm">http://www.indianasuicidepreventioncoalition.org/regional.htm</a>

## Conclusion

Suicide continues to be a serious public health issue for the nation and for Indiana. Suicide took the lives of 735 Hoosiers at a rate of 11.7 per 100,000 population in 2005, making suicide the 11<sup>th</sup> leading cause of death. Suicide fluctuates between the 2<sup>nd</sup> and 3<sup>rd</sup> leading cause of death for youth ages 15-19. As with other public health issues, efforts to reduce suicide require multiple strategies at national, state, and community level. The objective of this report was to take the initial step of the public health approach: to define the problem, both in the U.S. and in Indiana. Hopefully, the current report will help community leaders begin to identify the causes of suicide, develop and implement interventions, and ultimately evaluate the interventions.

## **Suicide Prevention Organizations and Websites**

Many local, state, and national organizations exist to help with suicide awareness and intervention. There are a number of tools that can be used to assess the risk factors and protective factors in a community in order to determine the potential for suicide and opportunities for prevention. Such tools include questionnaires that are readily available to mental health professionals, counselors, and health care providers. An example of a community assessment tool is available at <a href="http://www.sprc.org/library/catool.pdf">http://www.sprc.org/library/catool.pdf</a>. The availability of crisis intervention services, hotlines, and easy access to mental health providers can impact the problem of suicide in Indiana. Training and sessions on suicide awareness are also effective. All communities should become aware of what can be accomplished to prevent suicide in their locale. For more information on suicide prevention training available in Indiana please go to: <a href="http://www.indianasuicidepreventioncoalition.org/indiana.htm">http://www.indianasuicidepreventioncoalition.org/indiana.htm</a>.

## **Indiana Organizations and Websites**

## **Indiana State Department of Health**

Injury Prevention Program 2 North Meridian Street Indianapolis, IN 46204

Program contact: Dr. Charlene Graves (<a href="mailto:chgraves@isdh.state.in.us">chgraves@isdh.state.in.us</a>)

Data contacts: Jodi Hackworth (jhackworth@isdh.in.gov) or Joan Marciniak

(jomarciniak@isdh.in.gov) Phone: (317) 233-7415 Fax: (317) 233-7805

The Injury Prevention program disseminates descriptive statistical information to those entities throughout the state having an interest in suicide and preventive control strategies. The program's goal is to develop a functional surveillance system for all injuries and establish a core injury team for the state.

#### **Indiana Suicide Prevention Coalition**

www.indianasuicidepreventioncoalition.org
Behavioral Health and Family Studies Institute
Indiana University-Purdue University Fort Wayne
2101 East Coliseum Boulevard, 142 Neff Hall
Fort Wayne, IN 46805

Contact: Colleen Carpenter, Project Coordinator

Phone: (260) 481-4184 Fax: (260) 481-5767

Email: <a href="mailto:carpentc@ipfw.edu">carpentc@ipfw.edu</a>

See description in report on page 36.

## **Indiana Partnership to Prevent Violent Injury and Death**

www.ippvid.org

Riley Hospital for Children 702 Barnhill Drive, Room 0903 Indianapolis, IN 46202

Phone: (317) 278-0945 Fax: (317) 278-3798

The mission of the Partnership is to prevent and reduce the frequency of violent injuries and deaths throughout the state of Indiana. The Partnership aims to facilitate development of a coordinated, unified strategy, and to decrease violent injuries and deaths through the use of data collection, research, education and law reform.

#### **Mental Health America of Indiana**

www.mentalhealthassociation.com

http://www.mhai.net/map\_index.htm (Contact information for county-level organizations)

1431 North Delaware Street Indianapolis, IN 46202

Phone: (317) 638-3501 or (800) 555-MHAI (6424)

Fax: (317) 638-3540

The Mental Health Association focuses on mental health issues in Indiana and works for victory over mental illness through education, advocacy, and direct services such as support groups. As of September 2007, 52 counties have county-level mental health organizations.

## Mental Health America of Greater Indianapolis Crisis and Suicide Intervention Services

www.mcmha.org

2506 Willowbrook Pkwy, Suite 100

Indianapolis, IN 46205

Phone: (317) 251-7575 (24-hour Crisis Line) or (317) 251-0005

Fax: (317) 254-2800

Mental Health America of Greater Indianapolis offers a 24-hour telephone information and referral service for suicide prevention, family violence, depression, and a wide range of other issues. Their services are confidential and free. The Crisis and Suicide Intervention Service also offers training for community agencies, educational presentations to schools, churches, and civic groups, and phone consultation with concerned family members and friends.

# **Survivors of Suicide Support Groups**

www.indianasuicidepreventioncoalition.org

Support groups for survivors (friends and family left behind after a suicide) exist across Indiana. The support groups also advocate for education and prevention of suicide. Check website for nearest location

## **National Organizations and Websites**

## **Suicide-Specific Organizations**

## American Association of Suicidology (AAS)

www.suicidology.org

5221 Wisconsin Avenue, NW

Washington, DC 20015 Phone: (202) 237-2280 Fax: (202) 237-2282

The American Association of Suicidology is dedicated to understanding and preventing suicide. AAS promotes research, public awareness programs, education and training for professionals and volunteers, and serves as a national clearinghouse for information on suicide. Suicide grief support brochures: "Survivors of Suicide, Coping with the Suicide of a Loved On." are available.

## **American Foundation for Suicide Prevention (AFSP)**

www.afsp.org

120 Wall Street, 22nd Floor New York, New York 10005

Phone: (888) 333-AFSP or (212) 363-3500

Fax: (212) 363-6237

The American Foundation for Suicide Prevention funds research, education, and treatment aimed at the prevention of suicide and the understanding of depression. AFSP maintains a national directory of survivor support groups. The website also has recommendations for the media about responsible reporting on suicide.

#### Suicide Prevention Action Network USA, Inc. (SPAN)

www.spanusa.org

1025 Vermont Avenue, NW, Suite 1066

Washington, DC 20005 Phone: (202) 449-3600 Fax: (202) 449-3601

The Suicide Prevention Action Network is a national grassroots, non-profit organization bridging all suicide prevention efforts to lower suicide rates (especially among young people) in the U.S. and worldwide. SPAN helped to develop and pass the Garrett Lee Smith Memorial Act. This legislation, which was signed into law by President Bush on October 21, 2004, was the first ever to specifically address youth suicide prevention and authorizes \$82 million over three years from 2005 to 2007.

## **Suicide Prevention Resource Center (SPRC)**

www.sprc.org

Education Development Center, Inc.

55 Chapel Street

Newton, MA 02458-1060

Phone: (617) 964-5448 or (877) 438-7772

The Suicide Prevention Resource Center is a national resource center that provides technical assistance, training and information in order to strengthen suicide prevention networks and advance the National Strategy for Suicide Prevention. The center provides suicide prevention technical assistance to national, state, and local organizations, disseminates suicide prevention related information, identifies best practices in suicide prevention, develops and delivers training on suicide prevention topics, and conducts policy activities. SPRC maintains an on-line library with extensive information and a registry of best practices which is a helpful resource.

## **Centre for Suicide Information**

www.suicideinfor.ca

Suite 320, 1202 Centre Street S.E.

Calgary, AB T2G 5A5 Phone: (403) 245-3900 Fax: (403) 245-0299

Centre for Suicide Information is a Canadian organization which maintains a resource library with extensive information on suicide prevention, post intervention, and intervention efforts and trends, and provides information to develop successful suicide prevention, intervention, and post intervention programs, including statistics, resource people, computer literature searches, and document delivery.

# **Light for Life Foundation International Yellow Ribbon Suicide Prevention Program**

www.yellowribbon.org

P.O. Box 644

Westminster, CO 80036-0644

Phone: (303) 429-3530 Fax: (303) 426-4496

The Yellow Ribbon Suicide Prevention Program provides information on suicide, survivors support groups, and task forces and coalitions around the country. They also provide seminars and presentation that teach awareness and suicide prevention skills with chapters around the country to provide support and services to prevent suicide.

## Livingworks

www.livingworks.net

P.O. Box 9607 Fayetteville, NC 28311

Phone: (910) 867-8822 Fax: (910) 867-8832

The Livingworks Program is a comprehensive, coordinated and integrated approach to preventing suicide that involves the entire community. Livingworks Program is best known for distributing the ASIST Training (Applied Suicide Intervention Skills Training). The ASIST Training has been refined for over 23 years with feedback from over 500,000 participants and 3,000 active trainers.

## **National Alliance on Mental Illness (NAMI)**

www.nami.org

Colonial Place Three 2107 Wilson Blvd., Suite 300 Arlington, VA 22201-3042 Phone: (703) 524-7600

Fax: (703) 524-9094

The National Alliance on Mental Illness is the nation's largest grassroots mental health organization dedicated to improving the lives of persons living with serious mental illness and their families. Founded in 1979, NAMI has become the nation's voice on mental illness, a national organization including NAMI organizations in every state and in over 1,100 local communities across the country who join together to meet the NAMI mission through advocacy, research, support, and education.

# National Center for Suicide Prevention Training EDC/Harvard School of Public Health

www.ncspt.org

55 Chapel Street

Newton, MA 02458-0160

Phone: (617) 964-5448 or (877) 438-7772

Fax: (617) 969-9186

The National Center for Suicide Prevention Training helps with development of suicide prevention training websites for professionals. The Center's website provides internet-based workshops on the following topics: using data to educate the public and policy makers about youth suicide, youth suicide prevention planning and evaluation and youth suicide prevention gatekeeper training. In addition, the website provides on-line resources and archives of the materials and discussions generated during the facilitated workshops.

# National Organization for People of Color Against Suicide

www.nopcas.com

4715 Sargent Road, NE Washington, DC 20017

Phone: (202) 549-6039 or (866) 899-5317

The National Organization for People of Color Against Suicide is a national organization that focuses on helping minority suicide survivors.

#### **National Suicide Prevention Lifeline**

www.suicidepreventionlifeline.org **Phone:** (800) 273-TALK (8255)

The National Suicide Prevention Lifeline is a network of 24-hour crisis centers with a toll-free suicide prevention service available to anyone in suicidal crisis. Calls originating from anywhere in the United States will be routed to the nearest available crisis centers. This call-routing is based on crisis center call capacity and availability. With over 120 crisis centers across the country, the national suicide prevention lifeline's mission is to provide immediate assistance to anyone seeking mental health services.

#### **OPR** Institute

www.qprinstitute.com

P.O. Box 2867

Spokane, WA 99220

Phone: (888) 726-7926 or (509) 536-5100

Fax: (509) 536-5400

QPR is a simple educational program that teaches citizens how to recognize a mental health emergency and how to get a person at risk the help they need. QPR stands for Question, Persuade, and Refer which are the three simple steps that anyone can learn to help save a life from suicide.

## **Screening for Mental Health (SOS Suicide Prevention Program)**

www.mentalhealthscreening.org/schools/index.aspx

One Washington Street, Suite 304 Wellesley Hills, MA 02481

**Phone:** (781) 239-0071 **Fax:** (781) 431-7447

Screening for Mental Health has a suicide prevention program called the SOS Signs of Suicide Prevention Program. The training is a nationally recognized program for secondary school students. It is the only school-based program to show a reduction in suicide attempts (by 40%) in a randomized controlled study (American Journal of Public Health, March, 2004).

## **Stop a Suicide Today**

www.stopasuicide.org

Stop a Suicide Today can teach how to recognize the warning signs of suicide in family, friends, co-workers, and patients, and why one needs to respond as with any medical emergency. The program emphasizes the relationship between suicide and mental illness and the notion that a key step in reducing suicide is to get those in need into mental health treatment.

## **Suicide Awareness Voice of Education (SAVE)**

www.save.org

9001 E. Bloomington Fwy, Ste 150 Bloomington, MN 55420

National Hotline (800) 273-TALK (800-273-8255)

Phone: (952) 946-7998

Suicide Awareness Voice of Education's mission is to educate the public about suicide prevention and to speak for suicide survivors. SAVE is a public awareness campaign funded by grant from Minnesota Department of Public Health, "Depression: Treat It As If Your Life Depended On It."

## Youth Suicide Prevention School-based Guide

theguide.fmhi.usf.edu

Contact: Stephen Roggenbaum

Louis de la Parte Florida Mental Health Institute (FMHI)

The University of South Florida

13301 Bruce B. Downs Blvd., MHC-2405

Tampa, FL 33612-3899 Phone: (813) 974-6149 Fax: (813) 974-7376

The Guide is not a program but a tool that provides a framework for schools to assess their existing or proposed suicide prevention efforts (through a series of checklists) and provides resources and information that school administrators can use to enhance or add to their existing program.

## **Related Organizations**

## American Academy of Child and Adolescent Psychiatry (AACAP)

www.aacap.org

3615 Wisconsin Avenue, NW Washington D.C. 20016 Phone: (202) 966-7300

Fax: (202) 966-2891

The American Academy of Child and Adolescent Psychiatry promotes the following: an understanding of mental illnesses and removing the stigma associated with them; advancing efforts in prevention of mental illnesses, and assuring proper treatment and access to services for children and adolescents.

## **American Academy of Pediatrics (AAP)**

www.aap.org

141 Northwest Point Boulevard Elk Grove Village, Illinois 60007-1098

Phone: (847) 434-4000 Fax: (847) 434-8000

The American Academy of Pediatrics comprises 55,000 primary care pediatricians, pediatric medical specialist, and pediatric surgical specialists. AAP provides information on child health, advocacy, and safety and has a family-oriented publication, including one on adolescent development and suicide, and an on-line bookstore.

## **American Psychiatric Association**

www.psych.org

1000 Wilson Boulevard, Suite 1825 Arlington, VA 22209-3901

Phone: (707) 907-7300 Email: <u>apa@psych.org</u>

The American Psychiatric Association is the world's largest psychiatric organization representing over 38,000 psychiatric physicians from the U.S. and around the globe. The website has links to legislative issues affecting psychiatrists and patients, information on how to prepare for and respond to disasters and trauma, and links to psychiatric-related literature. APA also offers grants and fellowships.

## American Psychological Association (APA)

www.apa.org

750 First Street, NE Washington, DC 20002

Phone: (202) 336-5500 or (800) 374-2721

Fax: (202) 336-5568

The American Psychological Association is the largest scientific and professional organization representing psychology in the U.S. and the world's largest association of psychologists. APA works to advance psychology as a science, as a profession, and as a means of promoting human welfare. PsychINFO is an electronic database of abstracts on over 1,350 scholarly journals.

## The Brady Center to Prevent Handgun Violence (CPHV)

www.cphv.org

1225 Eye Street, NW, Suite 1100

Washington DC 20005 Phone: (202) 898-0792 Fax: (202) 371-9615

The Brady Center to Prevent Handgun Violence is the education, legal advocacy, and research affiliate of Handgun Control, Inc. CPHV's national initiatives include prevention programs for parents and youth on the risks associated with guns, legal representation for gun violence victims, and outreach to the entertainment community to encourage the deglamorization of guns in the media.

# Centers for Disease Control and Prevention (CDC) National Center for Injury Prevention and Control (NCIPC)

www.cdc.gov/ncipc

Mailstop MS K-65 4770 Buford Highway, NE Atlanta, GA 30341-3717

Phone: (800) CDC-INFO (232-4636)

FAX: (770) 488-4760

The National Center for Injury Prevention and Control is the lead federal agency for injury prevention. NCIPC works closely with other federal agencies, national, state, and local organizations, health departments, and research institutions and focuses on science-based prevention strategies to reduce injuries and deaths due to interpersonal violence and suicidal behavior.

#### **Center for School Mental Health Assistance**

http://csmha.umaryland.edu

University of Maryland at Baltimore Department of Psychiatry 737 West Lombard St., 4th Floor Baltimore, MD. 21201-1570

Phone: (888) 706-0980 or (410) 706-0980

Fax: (410) 706-0984

The Center for School Mental Health Assistance provides leadership and technical assistance to advance effective interdisciplinary school-based mental health programs. The Center offers a forum for training, the exchange of ideas, and promotion of coordinated systems of care that provide a full continuum of services to enhance mental health, development and learning in youth.

## Children's Safety Network (CSN)

www.edc.org/HHD/csn

55 Chapel Street

Newton, MA 02458-1060 Phone: (800) 225-4276 Fax: (617) 527-4096 Email: infot@hhd.org

The Children's Safety Network assists states, communities, and others to prevent child and adolescent injuries. CSN provides information, training, and technical assistance to facilitate the development of new injury and violence prevention programs and enhance and support existing efforts.

## The Gay, Lesbian and Straight Education Network (GLSN)

www.glsen.org

90 Broad Street, 2<sup>nd</sup> Floor New York, NY 10004 Phone: (212) 727-0135 Fax: (212) 727-0254

The Gay, Lesbian, and Straight Education Network strives to assure that each member of every school community is valued and respected, regardless of sexual orientation, by teaching the lesson of respect for all in public, private, and parochial K-12 schools. Founded as a small volunteer group in Boston in 1990, GLSEN led the fight that made Massachusetts the first state to ban discrimination against gay and lesbian students in public school in 1993.

## **Mental Help Net**

www.mentalhelp.net 570 Metro Place North Dublin, OH 43017

Phone: (614) 764-0143 Fax: (614) 764-0362

The Mental Help Net provides a comprehensive source of on-line mental health information, news and resources.

## Join Together

www.jointogether.org
One Appleton Street 4th floor
Boston, MA 02116
Phone: (617) 437-1500

Fax: (617) 437-9394

Join Together is a national resource for communities fighting substance abuse and gun violence. Join Together Online provides up to-date news and information and is a project of the Boston University School of Public Health.

## **Mental Health America**

www.nmha.org

2000 N. Beauregard Street, 6th Floor

Alexandria, VA 22311

Phone: (703) 684-7722 or (800) 969-6642

Fax: (703) 684-5968

Mental Health America (formerly known as the National Mental Health Association) provides referrals for mental health services to the public, local mental health associations, corporations and other mental health organizations. The Association's website has a link to depression screening tools for teens at <a href="www.depressionscreening.org">www.depressionscreening.org</a>. Please note that this depression screening is not intended to diagnose clinical depression but may help to identify symptoms for further evaluation.

## National Association of School Psychologists National Mental Health and Education Center

www.nasponline.org

4340 East West Highway Suite 402

Bethesda MD 20814

Phone: (301) 657-0270 or (866) 331-NASP

Fax: (301) 657-0275

The National Mental Health and Education Center promotes educationally and psychologically healthy environments for all children and youth by implementing research-based effective programs that prevent problems, enhance independence, and promote optimal learning. Their website has resources on mental illness, including depression and suicide.

## **National Depressive and Manic-Depressive Association**

www.ndmda.org/suicide

730 N. Franklin Street, Suite 501 Chicago, Illinois 60610-7204

Phone: (800) 826-3632 Fax: (312) 642-7243

The National Depressive and Manic-Depressive Association seeks to educate patients, families, professionals, and the public on the nature of depressive and manic-depressive illness as treatable medical diseases, to foster self-help for patients and families, to eliminate discrimination and stigma, to improve access to car, and to advocate for research toward the elimination of these illnesses.

#### **National Institute of Mental Health (NIMH)**

www.nimh.nih.gov/suicideprevention

6001 Executive Boulevard Rm. 8184 MSC 9663 Bethesda, MD 20892-9663

Phone: (301) 443-4513 or (866) 615-6464

Fax: (301) 443-4279

The National Institute of Mental Health Suicide Research Consortium coordinates program development in suicide research across the Institute, identifies gaps in the scientific knowledge base on suicide across the life span, stimulates and monitors extramural research on suicide, keeps abreast of scientific developments in suicidology and public policy issues related to suicide surveillance, prevention and treatment, and disseminates science-based information on suicidology to the public, media, and policy makers.

## **National Mental Health Awareness Campaign (NMHAC)**

www.nostigma.org

The National Mental Health Awareness Campaign is a nationwide, anti-stigma, public education campaign announced jointly by President Clinton and Tipper Gore in June 1999 as part of the first ever White House Conference on Mental Health. NMHAC has launched a five-year effort that takes a life span approach to combating stigma by targeting three distinct groups — youth, adults and seniors. A website and Public Service Announcement (PSA) for youth has been developed and entitled: "It's Not Your Fault."

## **National Mental Health Information Center**

www.mentalhealth.org

P.O. Box 42557

Washington, D.C. 20015 Phone: (800) 789-2647 Fax: (240) 221-4295

The National Mental Health Information Center provides a user-friendly, "one stop" gateway to a wide range of resources on mental health services. The National Mental Health Information Center was developed for users of mental health services and their families, the general public, policy makers, providers, and the media. Information Center staff members are skilled at listening and responding to questions from the public and professionals. The staff quickly directs callers to federal, state, and local organizations dedicated to treating and preventing mental illness. The Information Center also has information on federal grants, conferences, and other events.

## Office of the Surgeon General

www.surgeongeneral.gov 5600 Fishers Lane Room 18-66

Rockville, MD 20857 Phone: 301-443-4000

Fax: 301-443-3574

The Surgeon General's Office has issued The Surgeon General's Call to Action to Prevent Suicide and accompanying fact sheets. Additional information on the Healthy People 2010 Objectives is available from the Office and through the website.

#### **National Youth Violence Prevention Resource Center**

www.safeyouth.org

P.O. BOX 10809

Rockville, MD 20849-0809

Phone: (866) 723-3968 or (866) SAFEYOUTH

Fax: (301) 562-1001

The National Youth Violence Prevention Resource Center was established as a central source of information on prevention and intervention programs, publications, research, and statistics on violence committed by and against children and teens. The Center is sponsored by the White House Council on Youth Violence, and the Resource Center is a collaboration between the Council, the Centers for Disease Control and Prevention and other federal agencies.

## **Substance Abuse and Mental Health Services Administration (SAMHSA)**

www.samhsa.gov

5600 Fishers Lane, Rm. 12-105

Rockville, MD 20857 Phone: (301) 443-4795 Fax: (301) 443-0284

The Substance Abuse and Mental Health Services Administration is a federal agency charged with improving the quality and availability of prevention, treatment, and rehabilitation services in order to reduce illness, death, disability, and cost to society resulting from substance abuse and mental illnesses.

## **Violence Policy Center**

www.vpc.org

1730 Rhode Island Avenue, NW

Suite 1014

Washington, DC 20036 Phone: (202) 822-8200 Fax: (202) 822-8205

The Violence Policy Center is a national educational organization that works to reduce gun death and injury in the U.S. by approaching firearms violence as a public health issue and illustrating the need to hold firearms to the same health and safety standards we hold all other consumer products.

Disclaimer: The sites listed here have been identified based on their relevance to intentional injury prevention. Views expressed on the web sites are not necessarily those of the Indiana State Department of Health.

The organizations list was partially adapted and modified from the summary produced by the Injury Prevention and Control Program of Massachusetts Department of Public Health

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